

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/12256

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G11B7/007 G11B7/013 G11B20/00

Rec'd PCT/PTO 16 MAY 2005

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G11B H03M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 02/25645 A (ISHIBASHI HIROMICHI ; MIYASHITA HARUMITSU (JP); SENG A HISASHI (JP); TA) 28 March 2002 (2002-03-28) abstract page 29, line 8 - line 16; figure 10 figure 20	1, 15-17
A	EP 0 723 216 A (SONY CORP) 24 July 1996 (1996-07-24) column 6, line 1 - line 48; figures 2B, 3 figure 4 figure 7	1, 15-17
A	EP 1 168 312 A (MATSUSHITA ELECTRIC IND CO LTD) 2 January 2002 (2002-01-02) paragraph '0036! - paragraph '0041!; figures 1, 2	1, 15-17
	-/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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P document published prior to the international filing date but later than the priority date claimed

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X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

12 May 2004

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PCT/EP03/12256

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 299 573 A (PHILIPS NV) 18 January 1989 (1989-01-18) the whole document	1, 15-17
A	EP 0 703 576 A (VICTOR COMPANY OF JAPAN) 27 March 1996 (1996-03-27)	
A	US 4 977 553 A (YOKOGAWA FUMIHIKO) 11 December 1990 (1990-12-11)	
E	WO 03/094158 A (LG ELECTRONICS INC) 13 November 2003 (2003-11-13) page 16 - page 19; figures 12-15	1-6, 14-17

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP03/12256

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0225645	A	28-03-2002	AU 8810401 A	02-04-2002
			CN 1466750 T	07-01-2004
			EP 1325497 A2	09-07-2003
			WO 0225645 A2	28-03-2002
			JP 2002203369 A	19-07-2002
			US 2003185128 A1	02-10-2003
EP 0723216	A	24-07-1996	JP 8147704 A	07-06-1996
			AT 202422 T	15-07-2001
			AU 716354 B2	24-02-2000
			AU 3789195 A	23-05-1996
			CA 2163177 A1	19-05-1996
			CN 1133471 A , B	16-10-1996
			DE 69521402 D1	26-07-2001
			DE 69521402 T2	16-05-2002
			DK 723216 T3	01-10-2001
			EP 1130591 A2	05-09-2001
			EP 0723216 A2	24-07-1996
			ES 2159596 T3	16-10-2001
			US 6304971 B1	16-10-2001
			US 6122739 A	19-09-2000
EP 1168312	A	02-01-2002	JP 2001084596 A	30-03-2001
			EP 1168312 A1	02-01-2002
			US 6549498 B1	15-04-2003
			CN 1335983 T	13-02-2002
			WO 0120603 A1	22-03-2001
			TW 518579 B	21-01-2003
EP 0299573	A	18-01-1989	NL 8701632 A	01-02-1989
			DE 3885169 D1	02-12-1993
			DE 3885169 T2	05-05-1994
			EP 0299573 A1	18-01-1989
			JP 1039632 A	09-02-1989
			US 4907216 A	06-03-1990
EP 0703576	A	27-03-1996	JP 3061098 B2	10-07-2000
			JP 7272282 A	20-10-1995
			CN 1142663 A	12-02-1997
			EP 0703576 A1	27-03-1996
			US 5572507 A	05-11-1996
US 4977553	A	11-12-1990	JP 2543523 B2	16-10-1996
			JP 63291218 A	29-11-1988
WO 03094158	A	13-11-2003	WO 03094158 A1	13-11-2003
			US 2003227853 A1	11-12-2003